

Applicant : Vincent P. Stanton  
Serial No. :  
Filed : HEREWITH  
Page : 2

Attorney's Docket No.: 11926-015002

U.S. Application Serial No. 09/357,024, filed July 19, 1999, entitled GENE SEQUENCE  
VARIACNES IN GENES RELATED TO FOLATE METABOLISM HAVING UTILITY IN  
DETERMINING THE TREATMENT OF DISEASE, which claims the benefit of Stanton, U.S.  
Provisional Application 60/093,484, filed July 20, 1998, entitled GENE SEQUENCE  
VARIACNES IN GENES RELATED TO FOLATE METABOLISM HAVING UTILITY IN  
DETERMINING THE TREATMENT OF DISEASE, which are all hereby incorporated by  
reference in their entireties including drawings and tables.--

Replace Table 10 beginning at page 171, with the following table:

Table 10

Variance Table

Hugo	GID	OMIM ID	VGX	Symbol	Description
Variance Start	Variance				
U73338	U73338	156570	GEN-69		Methionine
Synthase (SEQ ID NO:1)					
	194	(-201)C>G		5'	
	284	(-111)C>T		5'	
	1136	742G>A		V248M	
	1252	858C>T		Silent	
	1334	940G>A		D314N	
	1699	1305T>C		Silent	
	3150	2756A>G		D919G	
	3207	2813G>T		S938I	
	3209	2815G>C		G939R	
	5444	5050C>A		3'	
	5551	5157G>A		3'	
	5573	5179C>T		3'	
	5659	5265T>C		3'	
	5678	5284T>C		3'	
	5874	5480C>T		3'	
	5934	5540A>G		3'	
D78586	D78586	114010	GEN-BR		CAD PROTEIN (SEQ
ID NO:2)					
	3434	3408C>T		Silent	
	4313	4287T>C		Silent	
	4799	4773A>G		Silent	
	5255	5229C>T		Silent	
	5455	5429G>A		R1810Q	

Applicant : Vincent P. Stan  
Serial No. :  
Filed : HEREWITH  
Page : 3

Attorney's Docket No.: 11926-015002

5507	5481T>C	Silent
5810	5784C>T	Silent
6128	6102C>T	Silent
6626	6600C>T	Silent
6686	6660C>T	Silent

U09178 U09178 274270 GEN-HA  
Dihydropyrimidine Dehydrogenase (SEQ ID NO:3)

166	85T>C	C29R
577	496A>G	M166V
638	557A>G	Y186C
1708	1627A>G	I543V
3432	3351T>C	3'
3682	3601C>T	3'
3730	3649G>A	3'
3925	3844A>G	3'
3937	3856T>C	3'

U19720 U19720 600424 GEN-II Folate  
Transporter (SLC19A1) (SEQ ID NO:4)

175	80G>A	R27H
341	246C>G	Silent
791	696C>T	Silent
1067	972G>A	Silent
1337	1242C>A	Silent
1997	1902T>C	3'
2100	2005^2006insG	3'
2582	2487T>G	3'
2617	2522C>T	3'
2652	2557T>C	3'

U92868 U92868 600424 GEN-LUK Homo sapiens reduced  
folate carrier (RFC1) gene, exons 1a, 1c and 1b (SEQ ID NO:5)

431	431A>G	Intron
441	441A>G	Intron
498	498C>T	Intron
579	579G>C	Intron
599	599G>C	Intron

X02308 X02308 188350 GEN-KL Thymidylate  
synthetase (SEQ ID NO:6)

1066	961T>C	3'
1136	1031A>G	3'
1497	1392T>A	3'

D00517 D00517 188350 GEN-LUC Thymidylate  
synthase, promoter (SEQ ID NO:7)

276	276C>T	Intron
321	321T>C	Intron
452	452G>A	Intron

Applicant : Vincent P. Stan  
Serial No. :  
Filed : HEREWITH  
Page : 4

Attorney's Docket No.: 11926-015002

457	457^insC	Intron
491	491C>A	Intron
533	533T>C	Intron
624	624A>C	Intron
639	639A>G	Intron
655	655T>C	Intron

D00596 D00596 188350 GEN-LUD Homo sapiens  
gene for thymidylate synthase, exons 1, 2, 3, 4, 5, 6, 7,  
complete cds (SEQ ID NO:8)

701	701A>C	Intron
716	716A>G	Intron
732	732T>C	Intron
1293	1293A>G	Intron
1322	1322C>G	Intron
1379	1379T>C	Intron
1590	1590C>T	Intron
1688	1688C>G	Intron
2401	2401A>G	Intron
2429	2429G>A	Intron
2488	2488C>T	Intron
2594	2594G>T	Intron
2618	2618G>A	Intron
3083	3083G>A	Intron
3125	3125G>A	Intron
3212	3212C>T	Intron
3619	3619T>A	Intron
3635	3635G>A	Intron
4256	4256G>A	Intron
4898	4898A>G	Intron
5006	5006C>T	Intron
5062	5062G>A	Intron
5167	5167G>A	Intron
11069	11069A>G	Intron
11238	11238C>T	Intron
11293	11293T>G	Intron
11422	11422T>C	Intron
11686	11686C>T	Intron
12598	12598T>C	Intron
13171	13171T>C	Intron
13298	13298G>A	Intron
13645	13645T>C	Intron
13751	13751C>A	Intron
13782	13782T>C	Intron
13806	13806T>C	Intron
13813	13813T>C	Intron

Adapt

004250-EE9550

Applicant : Vincent P. Stan  
Serial No. :  
Filed : HERewith  
Page : 5

Attorney's Docket No.: 11926-015002

14479 14479A>G Intron  
14546 14546^insT Intron  
14585 14585C>T Intron  
14729 14729G>A Intron  
14787 14787C>T Intron  
14795 14795G>A Intron  
15041 15041T>C Intron  
15343 15343G>A Intron  
15449 15449G>A Intron  
15502 15502G>A Intron  
15545 15545C>T Intron  
15589 15589A>G Intron  
15769 15769C>T 3'  
15839 15839A>G 3'  
16148 16148G>A 3'  
16198 16198T>G 3'  
16202 16202G>T Intron

X59618 X59618 180390 GEN-M3 Ribonucleotide  
reductase M2 polypeptide (SEQ ID NO:9)

128 (-67)G>A 5'  
189 (-6)T>G 5'  
524 330C>G Silent  
1399 1205T>A 3'  
1464 1270G>A 3'  
1636 1442C>T 3'  
1738 1544C>T 3'  
2259 2065T>C 3'

S72487 S72487 131222 GEN-3LD Thymidine  
phosphorylase, partial (SEQ ID NO:10)

183 19G>A D7N  
483 319C>T 3'  
601 437G>C 3'  
1299 1135G>A 3'

M58602 M58602 131222 GEN-LUB Thymidine  
phosphorylase, promoter and genomic (SEQ ID NO:11)

124 124C>T 3'  
439 439G>A 3'  
1044 1044^insCT 3'  
1331 1331G>A 3'  
1977 1977G>A Intron  
2149 2149G>A Intron  
2467 2467A>G Intron  
2634 2634C>G Intron  
2975 2975G>A Intron  
3116 3116G>T Intron

104460 "EEEEEE" end

Applicant : Vincent P. Stan  
Serial No. :  
Filed : HEREWITH  
Page : 6

Attorney's Docket No.: 11926-015002

3255 3255A>C Intron  
3344 3344T>C Intron  
4051 4051C>A Intron  
4782 4782G>A Intron  
5022 5022T>C Intron  
5266 5266G>A Intron  
5285 5285C>G Intron  
5438 5438T>A Intron  
5482 5482C>T Intron  
5629 5629G>A Intron  
5648 5648C>T Intron  
5731 5731G>A Intron

M98045 M98045 136510 GEN-4C3 Homo sapiens  
folylpolyglutamate synthetase mRNA, complete cds (SEQ ID NO:12)  
802 732C>T Silent  
1747 1677G>T 3'  
1900 1830T>C 3'

U24253 U24253 136510 GEN-LUE Human  
folylpolyglutamate synthetase (FPGS) gene, exons 5-11, and  
partial cds (SEQ ID NO:13)

1424 1424C>A Intron  
1649 1649G>A Intron  
2554 2554A>G Intron

U24252 U24252 136510 GEN-LUF  
Folylpolyglutamate synthetase, promoter and exons 1-4 (SEQ ID  
NO:14)

263 263A>G Intron  
266 266G>T Intron  
527 527C>G Intron  
1037 1037A>G 5'  
1139 1139G>A Intron  
1217 1217C>T Intron  
1647 1647C>T Intron  
1955 1955G>A Intron  
2017 2017G>A Intron  
2037 2037G>A Intron  
2189 2189A>G Intron  
2282 2282C>T Intron  
2309 2309A>G Intron

U09806 U09806 236250 GEN-4FZ Human  
methylenetetrahydrofolate reductase mRNA, partial cds (SEQ ID  
NO:15)

120 120T>C Silent  
464 464T>G M155R  
519 519C>T Silent

0906333 09441

A2 cal